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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/772,011	01/29/2001	Nan Feng	JP919990263-US1	9243

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EXAMINER

CHOUDHURY, AZIZUL Q

ART UNIT	PAPER NUMBER
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2145

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07/31/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/772,011	Applicant(s) FENG ET AL.	
	Examiner AZIZUL CHOUDHURY	Art Unit 2145	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 December 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 January 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Detailed Office Action

This office action is in response to the correspondence received on December 28, 2007.

Response to Pre-Appeal Conference

In lieu of the applicant's arguments within the pre-appeal conference request, the finality of the last action is withdrawn.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 3-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kenner (US Patent No: 6,112,239) in view of Scott et al (US Patent No: 6,560,717), hereafter referred to as Kenner and Scott, respectively.

1. With regards to claims 1, 11 and 20, Kenner teaches through Scott, a method (a method is able to be an apparatus and a program) for balancing load among a plurality of mirror servers, wherein a user may select and get access to any one of said plurality of mirror servers within an identical web page (Kenner teaches distributing load amongst distributed mirror servers (column 5, lines 5-19, Kenner)), said method comprising the steps of:

- a. When said web page is accessed by a client, in response to a user input to establish a session to browse said web page, receiving said web page and a predetermined script at said client (Client-side software is used to determine which server to connect to (column 5, line 60 – column 6, line 3, Kenner), the software is downloaded from the MSP server (column 8, lines 27-32, Kenner) in an environment that supports downloading in HTTP(column 16, line 60, Kenner). Hence, a browser can be directed to the MSP and a software can be downloaded through a webpage interface);
- b. Automatically executing said script at said client so as to respectively create connections with each of said plurality of mirror servers and measure respective response times (The software can be run automatically (column 8, lines 37-41, Kenner));
- c. Selecting a mirror server having the shortest response time as a selected mirror server to handle the user's next action with said web page during the session (The software runs tests and determines how each mirror site ranks for the client the software is installed in. The appropriate mirror site can then be used to reduce response time (column 5, line 43 – column 6, line 3, Kenner)).

(While Kenner does not specifically disclose that the client-side load balancing software is downloaded through a webpage, Kenner does teach that the client accesses the MSP (the site from where the load balancing

software is downloaded) through the Internet (Figure 1, Kenner) and also supports the use of HTTP (column 16, line 60, Kenner). Official notice is hereby taken that it is well known to one skilled in the art, during the time of the invention, that software can be downloaded through HTTP in an network that uses the Internet since, HTTP is a widely used Internet compliant protocol.

Furthermore while Kenner teaches how the client-side software determines the appropriate mirror site to connect to for fulfilling its request, Kenner does not explicitly cite that the selected mirror server fulfills the client's future requests during the session. In the same field of endeavor, Scott also teaches a web load balancing system (see column 1, lines 44-45, Scott). In Scott's web load balancing system, once the load balancing procedure has assigned the client to a specific server, from amongst a plurality of servers, the client continues to communicate with only that assigned server for subsequent requests (see column 4, lines 28-44, Scott). This is equivalent to the claimed selected mirror server to handle the user's next action with said web page during the session. By accessing the same server for the user's next action, the system is more time efficient by not requiring new load-balancing comparisons for every client request/action. Therefore it would have been obvious to one skilled in the art, during the time of the invention, to have combined the teachings of Kenner with those of Scott, to provide load balancing with session ids to ensure subsequent client

- requests are serviced by the same assigned server (see column 4, lines 28-44, Scott)).
2. With regards to claim 3, Kenner teaches through Scott, the method wherein said automatically executing script comprises the steps of:
 - a. Calling a predetermined engine by said client (The software consists of a configuration utility (column 5, lines 39-40, Kenner)); and
 - b. Executing said script by said engine, comprising creating connections with each of said plurality of mirror servers and measuring respective response times (Tests are performed (column 5, lines 43-60, Kenner)).
 3. With regards to claims 4 and 13, Kenner teaches through Scott, the method (a method is able to be an apparatus) wherein said executing said script is performed in a multi-thread manner for said plurality of mirror servers (Modern processors and operating systems enable multithreaded execution)
 4. With regards to claims 5 and 14, Kenner teaches through Scott, the method (a method is able to be an apparatus) further comprising sending the client information to the mirror servers being connected (It is inherent that web browsers send IP information to servers and column 18, lines 20-21, Kenner).

5. With regards to claims 6 and 15, Kenner teaches through Scott, the method (a method is able to be an apparatus) wherein said client information includes at least one of IP address, domain name, platform name, platform version, and browser type of said client (It is inherent that web browsers send IP information to servers and column 18, lines 20-21, Kenner).
6. With regards to claims 7 and 16, Kenner teaches through Scott, the method (a method is able to be an apparatus) wherein said connections are created through proxies (Figure 1, elements 14 and 18, Kenner).
7. With regards to claims 8 and 17, Kenner teaches through Scott, the method (a method is able to be an apparatus) wherein said script can be re-started by said user during said session (User is allowed to re-rerun the utility (column 14, lines 18-19, Kenner)).
8. With regards to claims 9 and 18, Kenner teaches through Scott, the method (a method is able to be an apparatus) further comprising comparing respective response times of said plurality of mirror servers (Kenner's design allows for a variety of tests (column 10, line 5 – column 11, line 65, Kenner)).
9. With regards to claims 10 and 19, Kenner teaches through Scott, the method (a method is able to be an apparatus) further comprising the steps of:

- a. Notifying said user of the mirror server having the shortest response time (column 5, lines 52-60, Kenner);
 - b. Receiving user input selecting one of said mirror servers as the selected mirror server (column 9, lines 58-63, Kenner); and
 - c. Establishing access for the user to the mirror server (column 6, lines 4-50, Kenner).
10. With regards to claim 12, Kenner teaches through Scott, the method (a method is able to be an apparatus) wherein said predetermined script is transmitted together with said web page to said client (Client-side software is used to determine which server to connect to (column 5, line 60 – column 6, line 3, Kenner), the software can be downloaded into the client (column 8, lines 27-32, Kenner). The server providing the software can also provide other data (column 8, lines 13-19, Kenner));
11. The official notice and the motivation applied to claims 1, 11 and 20 are applicable to their respective dependent claims.

Response to Remarks

The arguments received on December 28, 2007 has been carefully examined but are not deemed fully persuasive. The following are the examiner's response to the applicant's arguments.

The first point of contention addressed by the applicants is that the Kenner art teaches “server-side optimization.” The examiner disagrees. Kenner teaches how client-side software is used to determine which server to connect to (column 5, line 60 – column 6, line 3, Kenner) and is downloaded and can be run from the browser of the client (column 8, lines 27-36, Kenner).

The second point of contention continues to involve Kenner’s teaching of “on-the-fly.” Applicant suggests that the prior art does not teach the traits of “dynamic transmitting and executing of script for measuring response time and selecting a server in response to the client/user accessing the web page.” The claim language states that a web page is accessed to download a script. The script/file is then executed automatically and measurements are attained. Based on the measurements, the appropriate mirror server is selected. Kenner teaches that the client-side software used to perform the load balancing (column 5, line 60 – column 6, line 3, Kenner), is downloaded from the MSP server (column 8, lines 27-32, Kenner) in an environment that supports downloading in HTTP (column 16, line 60, Kenner). Hence, a browser can be directed to the MSP and software can be downloaded through a webpage interface. In addition, Kenner teaches how the software automatically runs (column 8, lines 37-41, Kenner) and how the software retrieves web pages (column 5, line 67, Kenner), automatically selecting the appropriate mirror (also called by Kenner, “on-the-fly”) (column 6, lines 34-36, Kenner).

The third point of contention involves the claim limitation of the configuration utility being downloaded upon access to a website in response to a user request to

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browse that website. The applicant contends that Kenner fails to teach this limitation, the examiner respectfully disagrees. Kenner teaches a design wherein a client-side software is used to determine which server to connect to (column 5, line 60 – column 6, line 3, Kenner), the software is downloaded from the MSP server (column 8, lines 27-32, Kenner) in an environment that supports downloading in HTTP(column 16, line 60, Kenner). Hence, a browser can be directed to the MSP and software can be downloaded through a webpage interface. Furthermore, the newly added reference Scott further shows support for mirror servers being web servers (see column 1, lines 44-60, Scott).

The fourth point of contention involves the claim limitation of the “selected mirror server to handle the user’s next action with said web page during the session.” The applicant contends that Kenner fails to teach such a feature, the examiner has provided Scott prior art in lieu of this argument. In Scott’s load balancing system, once the load balancing procedure has assigned the client to a specific server, from amongst a plurality of servers, the client continues to communicate with only that assigned server for subsequent requests (see column 4, lines 28-44, Scott). This is equivalent to the claimed user’s next action with said web page during the session.

The fifth point of contention involves the claim limitation of “multithreaded execution.” The examiner stated that modern processors and operating systems enable multi-threaded execution. The applicant contends that Kenner does not teach such a feature. The examiner however stands by his statement. This is not some conclusion formulated merely by the examiner; it is well known in the art. If applicant is able to

provide evidence to the contrary, they are welcome to provide such evidence and the examiner will withdraw such a conclusion.

Finally, the applicant contends that the examiner has failed to teach all the claim limitations and that all words in a claim must be considered in judging patentability. The examiner has made diligent efforts to attain a full understanding of the claims. However, responsibilities lie not solely with the examiner. Applicants too must take diligent efforts to ensure that they are attaining a full understanding of the prior arts. It is important to not simply read prior art to attain a literal interpretation but to also attain an understanding of the spirit of the design. The examiner has made such efforts with the specifications of the claimed invention however, claims must be read to ensure they are not open to interpretations not supported by specifications. Keeping such factors in mind, the examiner is convinced that he has made a diligent effort in considering all the words in the claims and has addressed each of the claim limitations.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AZIZUL CHOUDHURY whose telephone number is (571)272-3909. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Cardone can be reached on (571) 272-3933. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/A. C./

Examiner, Art Unit 2145

/Jason D Cardone/
Supervisory Patent Examiner, Art Unit 2145